

Remarks

35 U.S.C. §101

Claims 14 and 15 have been cancelled.

35 U.S.C. §103(a)

The Examiner has rejected claims 1 to 4 and 6 to 15 as being unpatentable over US7111523 (Gagle) in view of US2006/0123060 (Allen).

The Examiner will be aware that in *ex parte* examination of patent applications, the Patent and Trademark Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent and Trademark Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent and Trademark Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985). A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie*

case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

Considering firstly claim 1, it will be seen that claim 1 has been amended to clarify that an agent object comprises information representing a respective agent and its availability status. Basis for this change can be found at page 8, lines 21 to 23 and page 13, lines 1 to 4 of the specification as filed. Claim 1 has further been amended to clarify that the contact objects and agent objects are replicated and synchronized at each of the contact centers whereby the network comprising said plurality of contact centers does not require a central network queue manager. Basis for this change is found at page 7, lines 15 and 16 and page 8, lines 10 to 13.

An advantage provided by replicating and synchronizing the contacts objects and agents objects stored in the plurality of contact centers of the network between all of said contact centers such that a central network queue manager is not required is that this arrangement obviates the problems that would be encountered in a system that does have such a central network queue manager where such queue manager suffers a failure. In the present invention, each contact center notifies each other contact center of changes in any of the contact objects and agent objects stored therein to thereby replicate and synchronize said contact objects and agent objects across all of the contact centers. Therefore, each contact center has an up to date view on all contacts 'queued' in the system and the availability status (among other information such as skill sets) of all agents in the system. If any of the contact centers suffers a failure in at least its ability to notify changes in contact objects and

agent objects stored at that contact center, the remaining contact centers can still operate to share workload through the replication and synchronization process. Thus, the network of contact centers according to the invention is versatile in its response to failures and load sharing.

In contrast, Gagle teaches use of a central network queue monitor server whereby a call queue server receiving an incoming call sends a notification of the call to the queue monitor server which in turn informs each of the remaining call queue servers of the call such that each call queue server maintains a current view of all queued calls in the system of contact centers. However, if the queue monitor server fails, a view of queued calls across the contact centers is no longer available (column 5, lines 53 to 60). As a solution to the failure of the central network queue monitor server, Gagle proposes providing a fail-over queue monitor server. This is expensive and inefficient and does not provide the versatility of the invention as defined by claim 1.

It can be seen therefore that the central network call monitor server is an essential component of the system taught by Gagle. It can also be seen that Gagle makes no disclosure or suggestion of replicating contact objects and agents objects between the contact centers such that a central network queue monitor server is not required. Furthermore, even though the individual contacts centers of Gagle can continue to operate separately when the queue monitor server fails, there is no ability for a subset of said contact centers to continue to load share as is possible in the system of the present invention when one of the contact centers fails at least in respect of its ability to notify other contact centers of changes in its stored contact objects and agent objects.

The Examiner acknowledges that Gagle does not teach the step of synchronizing agent objects but that this feature is known from Allen and that it would have been obvious to combine the teachings of these two references. However, the

combination of these two references as proposed would not result in synchronization of agent objects between all of the contacts centers as required by claim 1 and, in any event, Allen does not teach an agent object including the availability status of an agent.

Allen addresses the problem where a database of agent skill sets becomes out of date. This has nothing to do with agent availability to process a contact. Allen teaches storing agent skill sets in a central database, updating said data in the agent skill set database and synchronizing the routing system with the updated agent skill set data. Consequently, if one of ordinary skill were to apply the teaching of Allen to Gagle, it would result in a system having a central network means for updating data comprising agents skill sets at each of the contact centers. It would not, however, result in the storing at any or all of said contact centers of agent objects including availability statuses of said agents. Thus, the combination of Gagle and Allen does not teach all of the limitations of claim 1 and cannot result in the arrangement as defined by claim 1. It should also be noted that, in the context of the present invention, an agent object is changed (updated) in response to any change in an agent's availability. In Allen, an agent's skill set only changes in response to a change in the skill set and not the agent's availability. In this sense, the agent skill set taught by Allen does not comprise what one in the art would understand to be an agent object in the context of the present application.

Furthermore, in exemplary embodiments, the present invention resides in the matching of contact objects with agent objects to process a contact. The matching of a contact and an agent skill set in the combined teachings of Gagle and Allen is absent one vital piece of information, namely the agent availability. Gagle discloses means for determining an agent's availability. However, this is employed at the time of seeking to match a queued contact with an agent with the correct skill set rather than already forming a part of an agent object. Thus, the process of matching an agent to a queued contact is more complex in the system resulting from the

combination of Gagle and Allen and requires a real-time processing step of determining the availability of a suitable agent. In the present invention, the availability of the agent is known at the time of matching an agent to a 'queued' contact.

The combination of Gagle and Allen does not teach all of the limitations of claim 1 and the combination cannot result in the network arrangement defined by claim 1.

Independent claim 7 has been amended to read as:

"A contact center for use in a network of contact centers, said contact center comprising:

- a) a contact object memory storing a plurality of contact objects each representing a different contact in the network of contact centers; and*
- b) an agent object memory storing a plurality of agent objects each representing a different agent in the network of contact centers, each of said plurality of agent objects comprising information representing a respective agent and its availability status;*
- c) means for notifying changes in any of said contact objects and agent objects to other contact centers in the network of contact centers to thereby replicate and synchronize said contact objects and agent objects with those at each of the other contact centers."*

There is no suggestion in either of Gagle or Allen of arranging each of the contact centers to notify all of the other contact centers of changes in any of the contact objects and agents objects stored at said contact centers. This arrangement provides the versatile load sharing, fault tolerant system as described above and

provides the advantage that a central network queue manager or monitor server is not required.

Claim 7 is therefore considered to be both novel and not rendered obvious by Gagle or Allen whether taken singly or in combination for much the same reasons as discussed above.

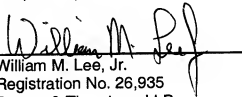
Remaining independent claims retained in the claim set have been amended to be consistent with claim 7.

The Examiner's rejection of claim 5 is moot in view of the foregoing.

In view of the foregoing, it is submitted that the claims presented herewith are in condition for allowance.

January 19, 2007

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "William M. Lee, Jr.", is written over a horizontal line.

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